

# MURPHY OIL SPILL FACTSHEET



**BACKGROUND:** On September 4, 2005, Murphy Oil USA, Inc. (Murphy) notified and requested assistance from the US Environmental Protection Agency (EPA) concerning an oil spill at their Meraux Refinery in St. Bernard Parish, Louisiana. A 250,000-barrel above-ground storage tank (tank # 250-2) was dislodged, lifted and damaged in flooding associated with Hurricane Katrina. At the time, the tank contained 65,000 barrels of mixed crude oil and released approximately 25,110 barrels (1,050,000 gallons). The released oil has impacted approximately 1,800 homes in an adjacent residential neighborhood of about one square mile. Various unnamed interceptor canals and other canals such as the 20 Arpent, the 40 Arpent, the Meraux, the Corinnes, and the Delarond have also been impacted.

## RESPONSE TO SPILL

### **Government's role:**

**EPA:** EPA is overseeing Murphy's ongoing sampling activities at residences and public properties. Overseeing activities include having its contractors accompany and monitor each sampling event, splitting ten percent of the collected samples and sending them to independent analysis for quality assurance/quality control (QA/QC), identifying and characterizing the extent of contamination in the area, providing written and photographic documentation of response activities, and overseeing removal activities. To get the most recent information on EPA's activities and contact information, please call EPA Information Line 800-533-3508 or go to [www.epa.gov/katrina](http://www.epa.gov/katrina) and [www.epaosc.net](http://www.epaosc.net).

**USCG:** Until October 2005, US Coast Guard oversaw Murphy's removal of free oil in canals, tank farm containment areas, and storm drains.

**ATSDR:** The Agency for Toxic Substances and Disease Registry reviewed EPA's sample results and released Health Consultations on November 8 and December 9, 2005 advising the public of the hazards at the site.

**LDEQ:** The LA Department of Environmental Quality's Risk Evaluation/Corrective Action Program's (RECAP) residential soil standards are being used as action levels to ensure human health safety.

### **Murphy Oil's ROLE:**

As the responsible party, Murphy Oil is conducting assessment and cleanup activities. Cleanup of public areas will include removal of oil stained sediment and soil. If the remaining soil sampling exceeds action levels, additional soil will be removed and replaced until action levels are met. If the remaining soil exceeds action levels, additional soil will be removed until these levels are met. The RECAP screening standards are developed to protect long-term (i.e., 30-year) exposures to residential children and adults. To learn more about the LDEQ RECAP, please call 888-763-5424 or go to <http://www.deq.louisiana.gov/technology/recap/2003/index.htm>.

Whether a settlement agreement is reached or not, Murphy will remove crude oil from properties in affected areas and advise residents of the cleaning process upon owners' permission and request.

# ASSESSMENT OF PROPERTY

## **How to get Properties Tested:**

To get properties tested, residents must contact Murphy Oil at 1-877-511-1006. If residents have not been contacted for an appointment after calling and would like to verify their contact information, please call Murphy Oil at 1-870-864-6420.

As of December 2005, Murphy Oil has tested approximately 1700 properties in the area.

## **TEST RESULTS:**

Upon residents' request, Murphy Oil will provide residents of tested properties with results either by mail or in person.

EPA's ten percent split sampling results can be found at [http://www.epaossc.net/site\\_profile.asp?site\\_id=1910](http://www.epaossc.net/site_profile.asp?site_id=1910)

**DATA EVALUATION:** ATSDR reviewed EPA's sample results and released in December 2005 a Health Consultation advising the public of the hazards at the site ([www.atsdr.cdc.gov](http://www.atsdr.cdc.gov)). The data indicated that there was a wide range of contaminant concentrations in sediment deposits throughout the community. The majority of properties tested showed no signs of significant oil-related contamination while a small percentage of the properties had clear signs of gross contamination, with additional properties showing significant contamination. There were elevated contaminant levels both indoors and outdoors, usually in the same properties.

The primary contaminants detected in sediments were polyaromatic hydrocarbons (PAHs), diesel and oil range organic chemicals, and arsenic.

PAHs such as benzo(a)pyrene, commonly found in fuel oils and crude oil, were detected above LDEQ's residential soil screening levels in approximately seven percent of the split sediment samples. The oily nature of some sediment samples would result in elevated detection limits, leading to the actual PAHs levels potentially being above screening levels instead of being reported as non-detect for these samples.

Approximately 30 percent of the samples exceeded the LDEQ's residential soil screening levels for diesel range organic chemicals and approximately 18percent of the samples exceeded LDEQ's screening levels for oil range organic chemicals.

The results of inorganic analyses are available for a limited number of sediment samples collected. Two samples had elevated arsenic levels of 12.5 mg/kg and 13.1 mg/kg, which exceeded LDEQ's screening level of 12 mg/kg for arsenic.

## HEALTH RECOMMENDATIONS

### **Crude Oil:**

The Louisiana Department of Health and Hospitals (LDHHs) recommend the following safety precautions for persons entering and/or cleaning properties in St. Bernard Parish impacted by the Murphy Oil spill:

#### **Protect your skin from contacting oil**

- \* Use oil resistant gloves
- \* Keep arms and legs covered
- \* Wear overalls or disposable clothing
- \* If you get oil on skin, wash well with soap and water



#### **Open doors and windows to ventilate oil contaminated properties**

#### **Be careful not to spread oil contamination to other places**

- \* Wear boot covers or leave work boots at the oil-contaminated property
- \* Do not track oil or oily sediments into your car or truck
- \* Do not move items with oil from contaminated areas to other locations

#### **Do not wash clothes worn in the oil spill area with family laundry**

#### **Children and pets should not enter oil contaminated areas**

### **MOLD:**

All flooded homes will have mold. According to the Centers for Disease Control and Prevention (CDC), residents should wear rubber boots, rubber gloves, goggles, and a N-95 mask when entering homes to be protected from mold exposures. Children and individuals with asthma and/or weakened immune systems should avoid any exposure to mold.



## HEALTH IMPACTS

### **CRUDE OIL:**

In the short-term, residents returning to the area should avoid direct contact with the crude oil contaminated sediments. These compounds can cause skin problems if they get on bare or broken skin. Skin contact with crude oils for short periods may cause itchy, red, sore, or peeling skin.

According to ATSDR, human epidemiological studies have shown that chronic occupational exposure to a high dose of mineral oils can cause skin cancer. An increased risk of skin cancer, sinonasal cancer, gastrointestinal cancer, and bladder cancer have been reported in metal workers and other occupations with prolonged contact with mineral oils. These carcinogenic effects may be related to the PAHs in the mineral oils.

### **MOLD:**

According to LDHHs, when exposed to mold, people allergic to mold may develop stuffy nose, irritated eyes, wheezing, difficulty breathing, shortness of breath, or skin irritation. People with weakened immune systems and with chronic lung diseases, such as obstructive lung disease, may develop mold infection in their lungs.

# RESOURCES



## U.S. Environmental Protection Agency

800-533-3508 [www.epa.gov/katrina](http://www.epa.gov/katrina) and [www.epaosc.net](http://www.epaosc.net)

## Agency for Toxic Substances and Disease Registry

(Heath Advisories) 888-422-8737 <http://www.atsdr.cdc.gov/>



## LA Department of Environmental Quality

888-763-5424 <http://www.deq.louisiana.gov/portal/>

## Louisiana Department of Health and Hospitals

225-342-9500

<http://www.dhh.state.la.us/>

## U.S. Coast Guard

<http://www.uscg.mil/USCG.shtm>



## St. Bernard parish

<http://www.sbpj.net>



## Murphy Oil Corporation

877-511-1006 <http://www.murphyoilcorp.com/>